

**Drawings.** The Examiner states that a “means (for) testing” from Claim 2 should be shown on a drawing.

Claim 2 recites:

means testing the packet-switched communications channel.

Figure 1 has been amended to show such means with reference numerals 510, 511, with the changes shown in red. Language has been added at page 7 to discuss the new reference numerals 510, 511. This amendment does not add new matter because the means was in claim 2 when the application was filed.

**Claim objections.** The Examiner objects to the specification as not providing antecedent basis for certain claim language, namely:

Claims 2 and 8, line 2, “on-demand communications channel,” and claim 5, line 2, “ISDN.” The specification has been amended at page 8, copying the quoted language from claims 2, 5, and 8 into the specification. Because these claims were in the application as filed, the amendment does not add new matter. The copied language at page 8 thus provides antecedent basis for the quoted language.

*Claim 3, line 2, “excessive latency.”* Latency is discussed in the specification at page 7, lines 36-39.

Reconsideration is requested.

**Claim rejections.** The Examiner rejects claims 1, 4, 6 and 7 as supposedly anticipated by US Pat. No. 5,923,659 to Curry et al. (“Curry”). The Examiner rejects claims 2, 3, 5 and 8 as supposedly obvious in view of a combination of Curry and US Pat. No. 6,301,352 to Chung et al. (“Chung”).

Applicant respectfully points out that this Examiner found all of claims 1-8 patentable in the International Preliminary Examination Report completed March 29, 2001 and mailed May 21, 2001. Indeed it was in reliance upon this Examiner's finding of patentability of claims 1-8 that applicant entered the national stage in this application as to claims 1-8.

*Claim 1.* Claim 1 says:

A data communications system comprising first and second apparatus, each of said first and second apparatus having a respective port disposed for sending and receiving common channel signaling data for telephone call processing, the first and second apparatus connected by a packet-switched communications channel, said channel of a type routing messages over an arbitrary path comprising hops including a final hop, said channel of a type in which the final hop of a path is not fully known in advance; each of said first and second apparatus further comprising means receiving common channel signaling data via its respective port, encapsulating said common channel signaling data in packets, and transmitting said packets to said packet-switched communications channel; each of said first and second apparatus further comprising means receiving said packets from said packet-switched communications channel, extracting said common channel signaling data from said packets, and transmitting said common channel signaling data via its respective port.

The Examiner suggests that this claim is anticipated by Curry, stating that the first and second apparatus of the claim are boxes 130, 140 of Curry. The Examiner further states that "Fig. 3" shows that each box has a respective port disposed for sending and receiving SS7 messages. Applicant's attorney is not, however, able to find this in Fig. 3. The Examiner states that Curry "converts SS7 protocol to TCP/IP" (page 3) and "converts TCP/IP to SS7" (page 4) when the claim calls for "encapsulation" and "extracting ... from said packets." Reconsideration is requested.

*Claim 2.* Claim 2 says:

The system of claim 1 wherein the first and second apparatus are further connected by an on-demand communications channel; each of said first and second apparatus further comprising means testing the packet-switched communications channel, and responding to a failed test of the packet-switched communications channel by establishing the on-demand communications channel; the means receiving common channel signaling

data via the respective port of the first and second apparatus responsive to the failed test by transmitting said encapsulated packets to said on-demand communications channel; the means receiving said packets from said on-demand communications channel responsive to the failed test by extracting said common channel signaling data from said packets, and transmitting said common channel signaling data via the respective ports of said first and second apparatus.

The Examiner admits that Curry lacks the further connection of an on-demand communications channel between the first and second apparatus, each of which has a port for common channel signaling data and the two apparatus connected by a packet-switched communications channel. The Examiner suggests that reference Chung may be combined with Curry to provide the missing on-demand communications channel between the first and second apparatus.

It is suggested that the references ought not to be combined. The claim is limited in that the first and second apparatus are "connected by a packet-switched communications channel, said channel of a type routing messages over an arbitrary path comprising hops including a final hop, said channel of a type in which the final hop of a path is not fully known in advance." Chung, however, gives no indication of employing such a channel. Indeed the channel 14 in Chung which is assumed to have failed gives every indication of being an ethernet cable. (The entire reference assumes that 16 is a local area network, see "LAN 16" at column 4, line 56 and again at column 4, line 58.) Chung actively teaches away from the type of communications channel to which the claim is limited, namely a packet-switched channel in which the final hop of a path is not fully known in advance.

Even if the references were combinable (and applicant suggests they are not), the references do not provide the missing element from Curry.

To appreciate what is missing from Chung, it is necessary to recount what Chung discloses. Chung has a box 12 which normally connects via LAN cable 14 to LAN 16 and from there via another LAN cable to device 18. Curry then attempts to provide for the possibility that LAN cable 14 would fail, in which case box 12 would (rather improbably) connect with modem 26, dial a telephone number on a voice telephone line 24, pass through the public switched

telephone network 20 to modem 28, then connect on line 30 to device 32, then would connect via LAN cable 34 to LAN 16, and from there via another LAN cable to device 18.

It is important to note that Chung's proposed "alternative path" (12, 26, 24, 20, 28, 30, 32, 34, 16, 18) does nothing to protect against failures in the LAN 16, nor against failures in the LAN cable between LAN 16 and device 18. Indeed the only failure protected against is failure of LAN cable 14. LAN cable 14 is most definitely not "a packet-switched channel in which the final hop of a path is not fully known in advance."

The references, even if combined, simply do not provide the missing element from Curry. Curry has the first and second boxes 130, 140 which the Examiner compares with the first and second apparatus of the claim. These boxes are said by the Examiner each to have an SS7 port and the Examiner says they communicate via a packet-switched network 136. To provide what is missing in the claim, Chung would have to provide a second link between two such boxes. It does not. Chung provides only a circuitous path meant to replace a broken LAN cable 14. And the boxes connected are mere LAN-connected boxes, not boxes connected with the type of communications channel (last hop not known) set forth in the claim. The "second box" of Chung is a mere computer 18 which does not, apparently, perform the encapsulation and unencapsulation set forth in the claim.

Replacing a LAN cable with a circuitous alternative path, as suggested by Chung, has little if anything in common with replacing a packet-switched network with an on-demand network.

Reconsideration is requested.

*Claim 3.* Claim 3 says:

The system of claim 2 wherein a failed test of the packet-switched communications channel comprises excessive latency in the packet-switched communications channel.

Neither Curry nor Chung recites "latency," let alone "excessive latency," as an indication of a

failed test leading to activation of an on-demand channel. Chung simply never mentions latency at all. Curry mentions "latency" only once (col. 3, line 6) in a discussion of a reason why ethernet is better than token-ring for a local area network. Curry, of course, lacks any mention of an on-demand alternative channel. Chung, which does mention an alternative channel, teaches away from using latency as a test, by stating only one test, namely checking to see if a TCP (transmission control protocol) connection has failed. (See col. 5, lines 7-18.)

Since the limitation of claim 3 cannot be seen in Curry nor in Chung, reconsideration is requested.

*Claim 4.* Claim 4 includes all the limitations of claim 1, and thus reconsideration is requested for the same reasons as given above in connection with claim 1.

*Claim 5.* Claim 5 includes all the limitations of claim 1, and thus reconsideration is requested for the same reasons as given above in connection with claim 1. In addition, the Examiner admits that neither Curry nor Chung teaches that an alternate path is ISDN, and instead states without support that it would have been obvious to do so. Applicant's attorney disagrees with this view, and motivated by the case of *In Re Ahlert and Kruger*, 165 USPQ 418 (CCPA 1970) applicant's attorney hereby challenges this view and asks whether the Examiner can show support for this view.

*Claim 6.* Claim 6 includes all the limitations of claim 1, and thus reconsideration is requested for the same reasons as given above in connection with claim 1.

*Claim 7.* Claim 7 has limitations corresponding closely to those of claim 1, and thus reconsideration is requested for the same reasons as given above in connection with claim 1.

*Claim 8.* Claim 8 has limitations corresponding closely to those of claim 2, and thus reconsideration is requested for the same reasons as given above in connection with claim 2.

**This application is to be examined "out of order."** Applicant notes that the Patent Office is obligated to continue its examination of this application "out of order" pursuant to 37 CFR § 1.496, last sentence. It is respectfully requested that this application be duly considered "out of order."

Respectfully submitted,



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WO 00/33519

PCT/US99/26894

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Fig. 1

